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EXAMINER

NANO, SARGON N

ART UNIT PAPER NUMBER

2157

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Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/055,097 | Applicant(s) TRAVERSAT ET AL. | |
| | Examiner Sargon N Nano | Art Unit 2157 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>11/02- 2/03- 11/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to application filed on Jan. 22, 2002. Claims 1 – 62 are pending examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 – 62 are rejected under 35 U.S.C. 102(e) as being anticipated by Kouznetsov U.S. Patent No. 6,782,527 (referred to hereafter as Kouznetsov).

Kouznetsov teaches the invention as claimed . Kouznetsov teaches a method of providing a set of desired application functions to a plurality of network – coupled computing appliances (see abstract).

As to claim 1, Kouznetsov teaches a peer computing system comprising:

a plurality of peer nodes operable to couple to a network, wherein the plurality of peer nodes are configured to implement a peer-to-peer environment on the network according to a peer-to-peer platform comprising one or more peer-to-peer platform protocols for enabling the plurality of peer nodes to discover each other, communicate

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with each other, and cooperate with each other to form peer groups and share content in the peer-to-peer environment (see col. 3 lines 35 – 52 and fig. 1 Kouznetsov discloses a peer to peer network appliances in communication among each others);

wherein the plurality of peer nodes are partitioned by a mechanism on the network into a set of one or more peer nodes inside the mechanism and a set of one or more peer nodes outside the mechanism, wherein peer nodes on opposite sides of the mechanism cannot communicate directly with each other on the network (see col. 5 lines 24 – 40 and fig.1, Kouznetsov discloses a peer to peer network with a firewall which separates the appliances)

a relay peer node operable to couple to the network outside the mechanism, and further operable to:

receive a message from a peer node outside the mechanism, wherein the message is for a peer node inside the mechanism; and relay the message to the peer node inside the mechanism (see col. 6 lines 24 – 37 , Kouznetsov discloses address translation dynamic mapping for network resources).

As to claim 2, Kouznetsov teaches the peer computing system as recited in claim 1, wherein the relay peer node is further operable to:

receive a message from the peer node inside the mechanism, wherein the message is for the peer node outside the mechanism; and relay the message to the peer node outside the mechanism (see col.6 lines 38 – 49 , Kouznetsov discloses the downloading of the updates when appropriate).

As to claim 3, Kouznetsov teaches the peer computing system as recited in claim 1, wherein the mechanism is a firewall (see col. 5 lines 24 – 40 and fig.1, Kouznetsov discloses a peer to peer network with a firewall).

As to claim 4, Kouznetsov teaches the peer computing system as recited in claim 1, wherein the mechanism is a Network Address Translation (NAT) gateway (see col. 6 lines 24 – 37 and fig. 1 . Kouznetsov discloses an address translation unit).

As to claim 5, Kouznetsov teaches the peer computing system as recited in claim 1, wherein the relay peer node is further operable to cache route information describing one or more routes to peer nodes on the network (see col. 5 lines 24 – 40 , Kouznetsov discloses physical and logical communication links between network appliances).

As to claim 6, Kouznetsov teaches the peer computing system as recited in claim 5, wherein, to relay the message to the peer node inside the mechanism, the relay peer is operable to use the cached route information to route the received message to the peer node outside the mechanism (see col. 5 lines 24 – 40 , Kouznetsov discloses that local networks are coupled through firewalls which may be implemented by routers).

As to claim 7, Kouznetsov teaches the peer computing system as recited in claim 5, wherein the relay peer node is further operable to: receive a query requesting route information to one of the plurality of peer nodes from another one of the plurality of peer nodes, wherein the query is formatted according to an endpoint routing protocol; and send the requested route information to the requesting peer node in accordance

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with the endpoint routing protocol (see col. 7 lines 42 – 49 , Kouznetsov discloses receiving a request from an appliance and then the compiled script is forwarded to appliance).

As to claim 8, Kouznetsov teaches the peer computing system as recited in claim 5, wherein the route information includes an ordered sequence of peer identifiers configured for use in routing a message to a destination peer node (see col.6 lines 38 – 49 , Kouznetsov discloses the downloading of the updates when appropriate).

As to claim 9, Kouznetsov teaches the peer computing system as recited in claim 1, wherein the message includes route information, and wherein, to relay the message to the peer node inside the mechanism, the relay peer is operable to use the route information included in the message to route the received message to the peer node outside the mechanism (see col.6 lines 38 – 49 , Kouznetsov discloses the downloading of the updates when appropriate).

As to claim 10, Kouznetsov teaches the peer computing system as recited in claim 9, wherein the route information includes an ordered sequence of peer identifiers configured for use in routing a message to a destination peer node (see col. 8 line 64 – col. 9 line 5 Kouznetsov discloses that an agent is acting as a relay server).

As to claim 11, Kouznetsov teaches a peer computing system comprising:

a plurality of peer nodes operable to couple to a network, wherein the plurality of peer nodes are configured to implement a peer-to-peer environment on the network according to a peer-to-peer platform comprising one or more peer-to-peer platform protocols for enabling the plurality of peer nodes to discover each other, communicate

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with each other, and cooperate with each other to form peer groups and share content in the peer-to-peer environment(see col. 3 lines 35 – 52 and fig. 1 Kouznetsov discloses a peer to peer network appliances in communication among each others);

wherein the plurality of peer nodes are partitioned by a mechanism on the network into a set of one or more peer nodes inside the mechanism and a set of one or more peer nodes outside the mechanism, wherein peer nodes on opposite sides of the mechanism cannot communicate directly with each other on the network(see col. 5 lines 24 – 40 and fig.1, Kouznetsov discloses a peer to peer network with a firewall which separates the appliances);

one or more relay peer nodes operable to couple to the network outside the mechanism, wherein each of the peer nodes inside the mechanism are operable to publish an advertisement on the one or more relay peer nodes(see col. 6 lines 24 – 37 , Kouznetsov discloses address translation dynamic mapping for network resources).

; and wherein each of the peer nodes outside the mechanism are operable to discover the advertisements for the peer nodes inside the mechanism published on the one or more relay peer nodes (see col. 9 lines 31 – 39, Kouznetsov discloses downloading the application from another appliance).

As to claim12, Kouznetsov teaches the peer computing system as recited in claim 11, wherein the mechanism is a firewall (see col. 5 lines 24 – 40 and fig.1, Kouznetsov discloses a peer to peer network with a firewall).

As to claim 13, Kouznetsov teaches the peer computing system as recited in claim 11, wherein the mechanism is a Network Address Translation (NAT) gateway (see col. 6 lines 24 – 37 and fig. 1 . Kouznetsov discloses an address translation unit).

As to claim 14, Kouznetsov teaches the peer computing system as recited in claim 11, wherein the one or more relay peer nodes are further operable to relay messages between the peer nodes outside the mechanism and the peer nodes inside the mechanism (see col. 5 lines 24 – 40 , Kouznetsov discloses that local networks are coupled through firewalls which may be implemented by routers).

As to claim 15, Kouznetsov teaches the peer computing system as recited in claim 14, wherein the relay peer node is further operable to cache route information describing one or more routes to peer nodes on the network (see col. 5 lines 24 – 40 , Kouznetsov discloses physical and logical communication links between network appliances).

As to claim 16, Kouznetsov teaches the peer computing system as recited in claim 15, wherein, to relay the messages between the peer nodes, the relay peer is operable to use the cached route information to route the received message to the peer node outside the mechanism (see col. 5 lines 24 – 40 , Kouznetsov discloses that local networks are coupled through firewalls which may be implemented by routers).

As to claim 17, Kouznetsov teaches the peer computing system as recited in claim 15, wherein the route information includes an ordered sequence of peer identifiers configured for use in routing a message to a destination peer node (see col.6 lines 38 – 49 , Kouznetsov discloses the downloading of the updates when appropriate).

As to claim 18, Kouznetsov teaches the peer computing system as recited in claim 14, wherein the message includes route information, and wherein, to relay the messages between the peer nodes, the relay peer is operable to use the route information included in the message to route the received message to the peer node outside the mechanism (see col.6 lines 38 – 49 , Kouznetsov discloses the downloading of the updates when appropriate).

As to claim 19, Kouznetsov teaches the peer computing system as recited in claim 18, wherein the route information includes an ordered sequence of peer identifiers configured for use in routing a message to a destination peer node (see col. 8 line 64 – col. 9 line 5 Kouznetsov discloses that an agent is acting as a relay server).

As to claim 20, Kouznetsov teaches a peer node comprising:

a network interface for coupling to a network (see col.5 lines 54 – 63 Kouznetsov discloses wireless network interface);

a memory comprising program instructions, wherein the program instructions are executable within the peer node to, according to a peer-to-peer platform:

receive a message from a source peer node on the network; and relay the message to a destination peer node(see col. 6 lines 24 – 37 , Kouznetsov discloses address translation dynamic mapping for network resources); and

wherein the peer nodes are configured to implement a peer-to-peer environment on the network according to the peer-to-peer platform, wherein the peer-to-peer platform comprises one or more peer-to-peer platform protocols for enabling the plurality of peer nodes to discover each other, communicate with each other, and

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cooperate with each other to form peer groups and share content in the peer-to-peer environment(see col. 3 lines 35 – 52 and fig. 1 Kouznetsov discloses a peer to peer network appliances in communication among each others).

As to claim 21, Kouznetsov teaches the peer node as recited in claim 20, wherein the program instructions are further executable to cache route information describing one or more routes to other peer nodes on the network(see col. 5 lines 24 – 40 , Kouznetsov discloses physical and logical communication links between network appliances).

As to claim 22, Kouznetsov teaches the peer node as recited in claim 21, wherein, to relay the message to the destination peer node, the program instructions are further executable to:

locate route information to the destination peer node in the cached route information and route the message to the destination peer node using the located route information(see col. 7 lines 42 – 49 , Kouznetsov discloses receiving a request from an appliance and then the compiled script is forwarded to appliance).

As to claim 23, the peer node as recited in claim 21, wherein the cached route information includes ordered sequences of peer identifiers configured for use in routing messages to destination peer nodes (see col.6 lines 38 – 49 , Kouznetsov discloses the downloading of the updates when appropriate).

As to claim 24, the peer computing system as recited in claim 21, wherein the relay peer node is further operable to:

receive a query requesting route information to a peer node from another peer node, wherein the query is formatted according to an endpoint routing protocol; and send the requested route information to the requesting peer node in accordance with the endpoint routing protocol(see col. 7 lines 42 – 49 , Kouznetsov discloses receiving a request from an appliance and then the compiled script is forwarded to appliance).

As to claim 25, Kouznetsov teaches the peer node as recited in claim 20, wherein the message includes route information, and wherein, to relay the message to the destination peer node, the program instructions are further executable to route the received message to the destination peer node using the route information included in the message(see col.6 lines 38 – 49 , Kouznetsov discloses the downloading of the updates when appropriate).

As to claim 26, Kouznetsov teaches the peer node as recited in claim 25, wherein the route information includes an ordered sequence of peer identifiers configured for use in routing messages to the destination peer node (see col. 8 line 64 – col. 9 line 5 Kouznetsov discloses that an agent is acting as a relay server).

As to claim 27, Kouznetsov teaches the peer node as recited in claim 20, wherein the source peer node is on the outside of a partitioning mechanism on the network, and wherein the destination peer node is on the inside of the partitioning mechanism, wherein the source peer node and the destination peer node cannot communicate directly with each other on the network across the partitioning mechanism (see col.5 lines 24 – 40 Kouznetsov discloses a firewall separating appliances).

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As to claim 28, Kouznetsov teaches the peer node as recited in claim 27, wherein the partitioning mechanism is a firewall (see col. 5 lines 24 – 40 and fig.1, Kouznetsov discloses a peer to peer network with a firewall).

As to claim 29, Kouznetsov teaches the peer node as recited in claim 27, wherein the partitioning mechanism is a Network Address Translation (NAT) gateway(see col. 6 lines 24 – 37 and fig. 1 . Kouznetsov discloses an address translation unit).

As to claim 30, Kouznetsov teaches a peer computing system comprising: a plurality of peer nodes operable to couple to a network; means for the plurality of peer nodes to discover each other, communicate with each other, and cooperate with each other to form peer groups and share content in a peer-to-peer environment on the network;

means for partitioning the plurality of peer nodes on the network into a set of one or more peer nodes inside the partition and a set of one or more peer nodes outside the partition, wherein peer nodes on opposite sides of the partition cannot communicate directly with each other on the network;

means for the peer nodes inside the partition to advertise themselves outside the partition; and

means for the peer nodes outside the mechanism to discover the advertised peer nodes inside the partition;

as to claim 31, Kouznetsov teaches the peer computing system as recited in claim 30, wherein the partition is a firewall(see col. 5 lines 24 – 40 and fig.1, Kouznetsov discloses a peer to peer network with a firewall).

As to claim 32, Kouznetsov teaches the peer computing system as recited in claim 30, wherein the partition is a Network Address Translation (NAT) gateway (see col. 6 lines 24 – 37 and fig. 1. Kouznetsov discloses an address translation unit).

As to claim 33, Kouznetsov teaches the peer computing system as recited in claim 30, further comprising means for relaying messages between the peer nodes outside the mechanism and the peer nodes inside the mechanism(see col. 5 lines 24 – 40 , Kouznetsov discloses that local networks are coupled through firewalls which may be implemented by routers).

As to claim 34, Kouznetsov teaches the peer computing system as recited in claim 33, wherein the means for relaying messages comprises a relay peer node, wherein the relay peer node comprises means for caching route information describing one or more routes to peer nodes on the network(see col. 5 lines 24 – 40 , Kouznetsov discloses physical and logical communication links between network appliances).

As to claim 35, Kouznetsov teaches the peer computing system as recited in claim 34, wherein, to relay the messages between the peer nodes, the peer computing system further comprises means for using the cached route information to route the received message to the peer node outside the mechanism(see col. 5 lines 24 – 40 , Kouznetsov discloses that local networks are coupled through firewalls which may be implemented by routers).

As to claim 36, Kouznetsov teaches the peer computing system as recited in claim 33, wherein the message includes route information, and wherein, to relay the messages between the peer nodes, the relay peer further comprises means for using the route information included in the message to route the received message to the peer node outside the mechanism (see col.6 lines 38 – 49 , Kouznetsov discloses the downloading of the updates when appropriate).

As to claim 37, Kouznetsov teaches a method comprising:
a plurality of peer nodes implementing a peer-to-peer environment on a network according to a peer-to-peer platform, wherein the peer-to-peer platform comprises one or more peer-to-peer platform protocols for enabling the plurality of peer nodes to discover each other, communicate with each other, and cooperate with each other to form peer groups and share content in the peer-to-peer environment(see col. 3 lines 35 – 52 and fig. 1 Kouznetsov discloses a peer to peer network appliances in communication among each others);

one of the plurality of peer nodes inside a partitioning mechanism on the network publishing an advertisement on a relay peer node outside the partitioning mechanism, wherein peer nodes inside the partitioning mechanism cannot directly communicate with peer nodes outside the partitioning mechanism(see col. 5 lines 24 – 40 and fig.1, Kouznetsov discloses a peer to peer network with a firewall which separates the appliances);

one of the plurality of peer nodes outside the partitioning mechanism discovering the advertisement to the peer node inside the partitioning mechanism on the relay peer

node; the peer node outside the partitioning mechanism sending a message to the peer node inside the partitioning mechanism to the relay peer node(see col. 5 lines 24 – 40 and fig.1, Kouznetsov discloses a peer to peer network with a firewall which separates the appliances); and

the relay peer node relaying the message to the peer node inside the partitioning mechanism(see col. 6 lines 24 – 37 , Kouznetsov discloses address translation dynamic mapping for network resources).

As to claim 38, Kouznetsov teaches the method as recited in claim 37, further comprising the relay peer node caching route information describing one or more routes to other peer nodes on the network, wherein the route information is configured for use in routing messages between peer nodes in the peer-to-peer environment(see col. 5 lines 24 – 40 , Kouznetsov discloses physical and logical communication links between network appliances).

As to claim 39, Kouznetsov teaches the method as recited in claim 38, wherein the cached route information includes ordered sequences of peer identifiers configured for use in routing messages to destination peer nodes(see col.6 lines 38 – 49 , Kouznetsov discloses the downloading of the updates when appropriate).

As to claim 40, Kouznetsov teaches the method as recited in claim 38, further comprising: the relay peer node receiving a query requesting route information to a peer node from another peer node, wherein the query is formatted according to an endpoint routing protocol; and the relay peer node sending the requested route information to the requesting peer node in accordance with the endpoint routing protocol(see col. 7 lines

42 – 49 , Kouznetsov discloses receiving a request from an appliance and then the compiled script is forwarded to appliance).

As to claim 41, Kouznetsov teaches the method as recited in claim 37, wherein the message includes route information, and wherein, in said relaying the message, the method further comprises routing the message to the peer node inside the partitioning mechanism using the route information included in the message(see col.6 lines 38 – 49 , Kouznetsov discloses the downloading of the updates when appropriate).

As to claim 42, Kouznetsov teaches the method as recited in claim 41, wherein the route information includes an ordered sequence of peer identifiers(see col.6 lines 38 – 49 , Kouznetsov discloses the downloading of the updates when appropriate).

As to claim 43, Kouznetsov teaches the method as recited in claim 37, wherein the partitioning mechanism is a firewall (see col. 5 lines 24 – 40 and fig.1, Kouznetsov discloses a peer to peer network with a firewall).

As to claim 44, Kouznetsov teaches the method as recited in claim 37, wherein the partitioning mechanism is a Network Address Translation (NAT) gateway(see col. 6 lines 24 – 37 and fig. 1 . Kouznetsov discloses an address translation unit).

As to claim 45, Kouznetsov teaches a method comprising: a plurality of peer nodes implementing a peer-to-peer environment on a network according to a peer-to-peer platform, wherein the peer-to-peer platform comprises one or more peer-to-peer platform protocols for enabling the plurality of peer nodes to discover each other, communicate with each other, and cooperate with each other to form peer groups and share content in the peer-to-peer environment; wherein one or more of the plurality of

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peer nodes are relay peer nodes(see col. 3 lines 35 – 52 and fig. 1 Kouznetsov discloses a peer to peer network appliances in communication among each others); and

one of the relay peer nodes caching route information describing one or more routes to other peer nodes on the network, wherein the route information is configured for use in routing messages between peer nodes in the peer-to-peer environment, and wherein the cached route information includes ordered sequences of peer identifiers configured for use in routing messages to destination peer nodes(see col. 5 lines 24 – 40 and fig.1, Kouznetsov discloses a peer to peer network with a firewall which separates the appliances).

As to claim 46, Kouznetsov teaches the method as recited in claim 45, further comprising:

the relay peer node receiving a query requesting route information to a peer node from another peer node, wherein the query is formatted according to an endpoint routing protocol and the relay peer node sending the requested route information to the requesting peer node in accordance with the endpoint routing protocol(see col.6 lines 38 – 49 , Kouznetsov discloses the downloading of the updates when appropriate).

As to claim 47, Kouznetsov teaches the method as recited in claim 45, further comprising: one of the plurality of peer nodes inside a partitioning mechanism on the network publishing an advertisement on the relay peer node, wherein the relay peer node is outside the partitioning mechanism, and wherein peer nodes inside the

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partitioning mechanism cannot directly communicate with peer nodes outside the partitioning mechanism one of the plurality of peer nodes outside the partitioning mechanism discovering the advertisement to the peer node inside the partitioning mechanism on the relay peer node(see col. 7 lines 42 – 49 , Kouznetsov discloses receiving a request from an appliance and then the compiled script is forwarded to appliance); and

the peer node outside the partitioning mechanism and the peer node inside the partitioning mechanism exchanging messages through the relay peer node(see col. 5 lines 24 – 40 and fig.1, Kouznetsov discloses a peer to peer network with a firewall).

As to claim 48, Kouznetsov teaches the method as recited in claim 47, further comprising the relay peer node using the cached route information to route the messages to the destination peer node(see col. 5 lines 24 – 40 , Kouznetsov discloses physical and logical communication links between network appliances).

As to claim 49, Kouznetsov teaches the method as recited in claim 47, wherein the partitioning mechanism is a firewall (see col. 5 lines 24 – 40 and fig.1, Kouznetsov discloses a peer to peer network with a firewall).

As to claim 50, Kouznetsov teaches the method as recited in claim 47, wherein the partitioning mechanism is a Network Address Translation (NAT) gateway (see col. 6 lines 24 – 37 and fig. 1. Kouznetsov discloses an address translation unit).

As to claim 51, Kouznetsov teaches an article of manufacture comprising software instructions executable to implement:

a plurality of peer nodes implementing a peer-to-peer environment on a network according to a peer-to-peer platform, wherein the peer-to-peer platform comprises one or more peer-to-peer platform protocols for enabling the plurality of peer nodes to discover each other, communicate with each other, and cooperate with each other to form peer groups and share content in the peer-to-peer environment(see col. 3 lines 35 – 52 and fig. 1 Kouznetsov discloses a peer to peer network appliances in communication among each others);

one of the plurality of peer nodes inside a partitioning mechanism on the network publishing an advertisement on a relay peer node outside the partitioning mechanism, wherein peer nodes inside the partitioning mechanism cannot directly communicate with peer nodes outside the partitioning mechanism(see col. 5 lines 24 – 40 and fig.1, Kouznetsov discloses a peer to peer network with a firewall which separates the appliances);

one of the plurality of peer nodes outside the partitioning mechanism discovering the advertisement to the peer node inside the partitioning mechanism on the relay peer node; the peer node outside the partitioning mechanism sending a message to the peer node inside the partitioning mechanism to the relay peer node(see col. 5 lines 24 – 40 and fig.1, Kouznetsov discloses a peer to peer network with a firewall which separates the appliances); and

the relay peer node relaying the message to the peer node inside the partitioning mechanism(see col. 6 lines 24 – 37 , Kouznetsov discloses address translation dynamic mapping for network resources).

As to claim 52, Kouznetsov teaches the article of manufacture as recited in claim 51, wherein the software instructions are further executable to implement the relay peer node caching route information describing one or more routes to other peer nodes on the network, wherein the route information is configured for use in routing messages between peer nodes in the peer-to-peer environment(see col. 5 lines 24 – 40 , Kouznetsov discloses physical and logical communication links between network appliances).

As to claim 53, Kouznetsov teaches the article of manufacture as recited in claim 52, wherein the software instructions are further executable to implement: the relay peer node receiving a query requesting route information to a peer node from another peer node, wherein the query is formatted according to an endpoint routing protocol; and the relay peer node sending the requested route information to the requesting peer node in accordance with the endpoint routing protocol(see col. 7 lines 42 – 49 , Kouznetsov discloses receiving a request from an appliance and then the compiled script is forwarded to appliance).

As to claim 54, Kouznetsov teaches the article of manufacture as recited in claim 51, wherein the message includes route information, and wherein, in said relaying the message, the software instructions are further executable to implement routing the message to the peer node inside the partitioning mechanism using the route information included in the message. (see col.6 lines 38 – 49 , Kouznetsov discloses the downloading of the updates when appropriate).

As to claim 55, Kouznetsov teaches the article of manufacture as recited in claim 51, wherein the partitioning mechanism is a firewall (see col. 5 lines 24 – 40 and fig. 1, Kouznetsov discloses a peer to peer network with a firewall).

As to claim 56, Kouznetsov teaches the article of manufacture as recited in claim 51, wherein the partitioning mechanism is a Network Address Translation (NAT) gateway (see col. 6 lines 24 – 37 and fig. 1 . Kouznetsov discloses an address translation unit).

As to claim 57, Kouznetsov teaches an article of manufacture comprising software instructions executable to implement:

a plurality of peer nodes implementing a peer-to-peer environment on a network according to a peer-to-peer platform, wherein the peer-to-peer platform comprises one or more peer-to-peer platform protocols for enabling the plurality of peer nodes to discover each other, communicate with each other, and cooperate with each other to form peer groups and share content in the peer-to-peer environment; one or more of the plurality of peer nodes implementing a relay service in accordance with the peer-to-peer platform to perform as relay peer nodes(see col. 3 lines 35 – 52 and fig. 1 Kouznetsov discloses a peer to peer network appliances in communication among each others);

and one of the relay peer nodes caching route information describing one or more routes to other peer nodes on the network, wherein the route information is configured for use in routing messages between peer nodes in the peer-to-peer environment, and wherein the cached route information includes ordered sequences of peer identifiers configured for use in routing messages to destination peer nodes(see

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col. 5 lines 24 – 40 and fig.1, Kouznetsov discloses a peer to peer network with a firewall which separates the appliances).

As to claim 58, Kouznetsov teaches the article of manufacture as recited in claim 57, wherein the software instructions are further executable to implement: the relay peer node receiving a query requesting route information to a peer node from another peer node, wherein the query is formatted according to an endpoint routing protocol and the relay peer node sending the requested route information to the requesting peer node in accordance with the endpoint routing protocol(see col. 7 lines 42 – 49 , Kouznetsov discloses receiving a request from an appliance and then the compiled script is forwarded to appliance).

As to claim 59, Kouznetsov teaches the article of manufacture as recited in claim 57, wherein the software instructions are further executable to implement: one of the plurality of peer nodes inside a partitioning mechanism on the network publishing an advertisement on the relay peer node, wherein the relay peer node is outside the partitioning mechanism, and wherein peer nodes inside the partitioning mechanism cannot directly communicate with peer nodes outside the partitioning mechanism; one of the plurality of peer nodes outside the partitioning mechanism discovering the advertisement to the peer node inside the partitioning mechanism on the relay peer node(see col. 7 lines 42 – 49 , Kouznetsov discloses receiving a request from an appliance and then the compiled script is forwarded to appliance).; and

the peer node outside the partitioning mechanism and the peer node inside the partitioning mechanism exchanging messages through the relay peer node(see col. 5 lines 24 – 40 and fig.1, Kouznetsov discloses a peer to peer network with a firewall).

As to claim 60, Kouznetsov teaches the article of manufacture as recited in claim 59, wherein the software instructions are further executable to implement the relay peer node using the cached route information to route the messages to the destination peer node(see col. 5 lines 24 – 40 , Kouznetsov discloses physical and logical communication links between network appliances).

As to claim 61, Kouznetsov teaches the article of manufacture as recited in claim 59, wherein the partitioning mechanism is a firewall (see col. 5 lines 24 – 40 and fig.1, Kouznetsov discloses a peer to peer network with a firewall).

As to claim 62, Kouznetsov teaches the article of manufacture as recited in claim 59, wherein the partitioning mechanism is a Network Address Translation (NAT) gateway (see col. 6 lines 24 – 37 and fig. 1. Kouznetsov discloses an address translation unit).


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sargon N Nano whose telephone number is (571) 272-4007. The examiner can normally be reached on 8 hour.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Sargon Nano
March 11, 2005



SALEH NAJJAR
PRIMARY EXAMINER